IN THE CLAIMS:

1. (CURRENTLY AMENDED) A flexible sensor for wirelessly determining a physical property in a patient's heart chamber, which sensor comprises a self-contained resonant circuit comprising a capacitor and an inductor, wherein the circuit is variable in response to the physical property of the patient, and wherein the sensor is sufficiently flexible to be folded for delivery percutaneously into the patient's heart chamber.

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2. (ORIGINAL) The sensor of Claim 1, wherein the capacitor is variable in response to the physical property of the patient.

3. (ORIGINAL) The sensor of Claim 1, wherein the inductor is adapted to allow inductance of a current in the resonant circuit when the sensor is subjected to a time-varying electromagnetic field.

4. (ORIGINAL) The sensor of Claim 1, wherein the physical property is pressure or temperature.

5. (ORIGINAL) The sensor of Claim 4, wherein the physical property is pressure.

6. (ORIGINAL) The sensor of Claim 1, wherein the sensor is disk-shaped.

7. (ORIGINAL) The sensor of Claim 6, wherein the sensor has one or more metallic members attached to a flat surface of the sensor.

8. (ORIGINAL) The sensor of Claim 6, wherein the sensor has one or more metallic members layered within the sensor.

9. (ORIGINAL) The sensor of Claim 6, wherein the sensor has a metallic ring surrounding a portion of the edge of the sensor.

10. (ORIGINAL) The sensor of Claim 1, wherein the sensor has a daisy or flower shape.

11. (ORIGINAL) The sensor of Claim 1, wherein the sensor has a shape so that portions of the sensor can be folded at an approximately 90° angle to a substantially flat middle section.

Cancel Claims 12 to 14 without prejudice.

15. (ORIGINAL) The sensor of Claim 1, wherein the sensor has one or more cut-outs to facilitate folding.

16. (ORIGINAL) The sensor of Claim 1 or 15, which can be folded into a U-shape.

Cancel Claims 17 to 21 without prejudice.

22. (ORIGINAL) The sensor of Claim 1, wherein the primary material of construction is flexible, biocompatible polymer or co-polymer.

23. (ORIGINAL) The sensor of Claim 22, wherein the polymer or co-polymer is selected from the group consisting of polyamide, polyethylene teraphthalate, polytetrafluoroethlyene, and co-polymers thereof.

Cancel Claim 24 without prejudice.

25. (ORIGINAL) The sensor of Claim 1, which contains a non-linear element and responds in a non-linear manner to an excitation signal.

26. (ORIGINAL) The sensor of Claim 1, wherein the capacitance is distributed across an array of smaller capacitors.

27. (ORIGINAL) The sensor of Claim 1, which can be folded so that a middle section remains substantially flat, the outer edges or surfaces are at substantially a 90° angle to said middle section, and a portion of the inductor is substantially coextensive with the outer edge.

28. (ORIGINAL) The sensor of Claim 27, which is substantially daisy-shaped.

29. (CURENTLY AMENDED) A sensor delivery system comprising:

a sensor ~~of Claim 1,~~ comprising a self-contained resonant circuit comprising a capacitor and an inductor, wherein the circuit is variable in response to the physical property of the patient, and wherein the sensor is sufficiently flexible to be folded for delivery percutaneously;

an outer catheter having at least one lumen and a distal open end, and

an inner cylindrical member,

wherein the sensor is folded within the distal end of the outer catheter and the inner cylindrical member pushes the folded sensor out at a desired location.

30. (ORIGINAL) The delivery system of Claim 29, wherein the inner catheter has a longitudinally extending lumen so that the delivery system can be slidably positioned over a guidewire.

31. (CURRENTLY AMENDED) The delivery system of Claim 29, wherein the sensor ~~of Claim 1~~ has a safety wire attached thereto and said safety wire extends proximally in a longitudinally extending groove or lumen.

32. (CURRENTLY AMENDED) A flexible sensor for wirelessly determining a physical property in a patient's heart chamber, which sensor comprises a self-contained resonant circuit ~~a~~ that is variable in response to said physical property, wherein the sensor is sufficiently flexible to be folded for delivery percutaneously to the patient's heart chamber.

33. (CURRENTLY AMENDED) A flexible sensor for wirelessly determining a physical property in a patient's heart chamber, which sensor comprises a self-contained resonant circuit comprising a capacitor and an inductor, wherein the circuit is variable in response to said physical property, wherein the capacitor is variable in response to the physical property of the patient, of the patient, wherein the inductor is adapted to allow inductance of a current in the resonant circuit when the sensor is subjected to a time-varying electromagnetic field, and wherein the sensor is sufficiently flexible to be folded for delivery percutaneously to the patient's heart chamber.

Please add the following claims:

34. (NEW) A flexible sensor for wirelessly determining a physical property in a patient's heart chamber, which sensor comprises a self-contained resonant circuit comprising a capacitor and an inductor, wherein the circuit is variable in response to the physical property of the patient, wherein the sensor is sufficiently flexible to be folded for delivery percutaneously, and wherein the sensor has an anchoring system attached to a flat surface of the sensor.

35. (NEW) The sensor of Claim 34, wherein the capacitor is variable in response to the physical property of the patient.

36. (NEW) The sensor of Claim 34, wherein the inductor is adapted to allow inductance of a current in the resonant circuit when the sensor is subjected to a time-varying electromagnetic field.

37. (NEW) The sensor of Claim 34, wherein the physical property is pressure or temperature.

38. (NEW) The sensor of Claim 37, wherein the physical property is pressure.

39. (NEW) The sensor of Claim 34, wherein the sensor is disk-shaped.

40. (NEW) The sensor of Claim 39, wherein the sensor has one or more metallic members attached to a flat surface of the sensor.

41. (NEW) The sensor of Claim 39, wherein the sensor has one or more metallic members layered within the sensor.

42. (NEW) The sensor of Claim 39, wherein the sensor has a metallic ring surrounding a portion of the edge of the sensor.

43. (NEW) The sensor of Claim 34, wherein the sensor has a daisy or flower shape.

44. (NEW) The sensor of Claim 34 wherein the sensor has a shape so that portions of the sensor can be folded at an approximately 90° angle to a substantially flat middle section.

45. (NEW) The sensor of Claim 34, wherein the anchoring system is a coil.

46. (NEW) The sensor of Claim 34, wherein the anchoring system has a projection with umbrella-like radial projections.

47. (NEW) The sensor of Claim 34, wherein the sensor has one or more cut-outs to facilitate folding.

48. (NEW) The sensor of Claim 34, which can be folded into a U-shape.

49. (NEW) The sensor of Claim 34, wherein the primary material of construction is flexible, biocompatible polymer or co-polymer.

50. (NEW) The sensor of Claim 49, wherein the polymer or co-polymer is selected from the group consisting of polyamide, polyethylene teraphthalate, polytetrafluoroethlyene, and co-polymers thereof.

51. (NEW) The sensor of Claim 34, which contains a non-linear element and responds in a non-linear manner to an excitation signal.

52. (NEW) The sensor of Claim 34, wherein the capacitance is distributed across an array of smaller capacitors.

53. (NEW) The sensor of Claim 34, which can be folded so that a middle section remains substantially flat, the outer edges or surfaces are at substantially a 90° angle to said middle section, and a portion of the inductor is substantially coextensive with the outer edge.

54. (NEW) The sensor of Claim 53, which is substantially daisy-shaped.

55. (NEW) A flexible sensor for wirelessly determining a physical property in a patient's heart chamber, which sensor comprises a self-contained resonant circuit comprising a capacitor and an inductor, wherein the circuit is variable in response to the physical property of the patient, wherein the sensor is sufficiently flexible to be folded for delivery percutaneously, and wherein a safety wire is attached to one surface of the sensor.

56. (NEW) The sensor of Claim 55, wherein the safety wire has a sheath.

57. (NEW) The sensor of Claim 56, wherein the sheath can be slid distally to free the safety wire from the sensor.

58. (NEW) The sensor of Claim 55, wherein the safety wire is attached to the sensor at an adhesive point.

59. (NEW) The sensor of Claim 58, wherein the adhesive point comprises an epoxy or a cyanoacrylate material.

60. (NEW) A flexible sensor for wirelessly determining a physical property in a patient's heart chamber, which sensor comprises a self-contained resonant circuit comprising a capacitor and an inductor, wherein the circuit is variable in response to the physical property of the patient, wherein the sensor is sufficiently flexible to be folded for delivery percutaneously, and wherein there are no conductive connections or via holes to provide a direct electrical conduit between the upper inductor coil and the lower conductor coil.

61. (NEW) The sensor of Claim 60, wherein the capacitor is variable in response to the physical property of the patient.

62. (NEW) The sensor of Claim 60, wherein the inductor is adapted to allow inductance of a current in the resonant circuit when the sensor is subjected to a time-varying electromagnetic field.

63. (NEW) The sensor of Claim 60, wherein the physical property is pressure or temperature.

64. (NEW) The sensor of Claim 63, wherein the physical property is pressure.